

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS: SHALL COME;

Syngenta Seeds, Inc.

MICCENS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLED WITH, AND THE THEE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY THAN SERIES FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPUISING THE VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE SIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR OFFICE THE TOTAL OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, GARDEN

'RENEGADE'

In Testimony Marrot, I have hereunto set my hand and caused the seal of the Hunt Marrety Protection Office to be affixed at the City of Washington, D.C. this ninth day of April, in the year two thousand and seven.

Altoste

Benze

Commissioner Plant Variety Protection Office Agricultural Marketing Service griculture

REPRODUCE LOCALLY. Include form number and do	ate on all reprodu	ctions			Form Approved - OMB No. 0581-0055		
U.S. DEPARTMEN AGRICULTURAL N SCIENCE AND TECHNOLOGY - PI	NT OF AGRICULTS	URE VICE	The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.				
APPLICATION FOR PLANT VAI (Instructions and information col	RIETY PROTECTI	ON CERTIFICATE	Application is required in order to dete (7 U.S.C. 2421). Information is held of	rmine if a p onfidential	nant variety protection certificate is to be issued until certificate is issued (7 U.S.C. 2426).		
1. NAME OF OWNER			TEMPORARY DESIGNATION OR EXPERIMENTAL NAME	l _	RIETY NAME		
Syngenta Seeds, Inc.				Rene	gade		
4. ADDRESS (Street and No., or R.F.D. No., City,	State, and ZIP Co.	de, and Country)	5. TELEPHONE (include area code)		FOR OFFICIAL USE ONLY		
600 N. Armstrong Place			(208) 322-7272 6. FAX (include area code)	PVPO	NUMBER 10600052		
Boise, ID 83704			(208) 327-9319	J	DATE		
7. IF THE OWNER NAMED IS NOT A "PERSON", ORGANIZATION (corporation, partnership, asso		8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION	DE	CEMBER 29, 2005		
Corporation		DE	February 25, 1975				
10. NAME AND ADDRESS OF OWNER REPRESE	ENTATIVE(\$) TO S	DERVE IN THIS APPLICATION. (First)	person listed will receive all papers)	F	FILING AND EXAMINATION FEES:		
Charleen Orthol Kir	n Brigg	9		E	· 4,382,00		
		- way 20-26		R	DATE 12/29/05 CERTIFICATION FEE:		
<u> </u>	_	•		E	_		
Boise, 1D 83711-4188	mpa	ID 83687		V	\$ 768.00 DATE 3/06/2007		
MAH 2/22/07				D	3/06/2001		
11. TELEPHONE (Include area code) (208) 3 27-7246* 4/-5 - 8.52.2	12. FAX (Included) (208): 327-9		13. E-MAIL	s com-	Kim. briggs @ syngesta.com		
(208) 327-7240* 		319 467 - 4559 AME (Botanical)	18. DOES THE VARIETY CONT				
Bean, Garden	Fabaceae	,	☐ YES ☑ NO				
15. GENUS AND SPECIES NAME OF CROP 17. IS THE VARIETY A FIRST GENERATION HYBRI				O USDA-APHIS REFERENCE NUMBER FOR THE LATE THE GENETICALLY MODIFIED PLANT FOR			
Phaseolus vulgaris L.	YES	NO	COMMERICALIZATION.				
19. CHECK APPROPRIATE BOX FOR EACH ATTA	I ACHMENT SUBMI	ITTED	20. DOES THE OWNER SPECI	FY THAT	SEED OF THIS VARIETY BE SOLD AS A CLASS		
(Follow instructions on reverse)	of the Mariety		OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) YES (If "yes", answer items 21 and 22 below) NO (If "no", go to item 23)				
a. Exhibit A. Origin and Breeding History	or the variety		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?				
b. Exhibit B. Statement of Distinctness	rietu		NUMBER OF CLASSES?				
 c.	-	1	IF YES, WHICH CLASSES? FOUNDATION REGISTERED CERTIFIED				
<u>—</u>			22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?				
-				No?			
f. Statement that a Voucher Sample (4,0 will be deposited and maintained in an repository)			IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.				
g. Filing and Examination Fee (\$4,382), in States" (Mail to the Plant Variety Protect		reasurer of the United	FOUNDATION REGISTERED CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)				
23. HAS THE VARIETY (INCLUDING ANY HARVES FROM THIS VARIETY BEEN SOLD, DISPOSE OTHER COUNTRIES?	STED MATERIAL) D OF, TRANSFER	OR A HYBRID PRODUCED RED, OR USED IN THE U. S. OR	24. IS THE VARIETY OR ANY O INTELLECTUAL PROPERT	OMPONE Y RIGHT	NT OF THE VARIETY PROTECTED BY PLANT BREEDER'S RIGHT OR PATENT)?		
☑ YES ☐ NO	TOOT DATE BIS	DOCTON TOWNSTER OF USE	YES NO		TE OF FILING OR ISSUANCE AND ASSIGNED		
IF YES, YOU MUST PROVIDE THE DATE OF FOR EACH COUNTRY AND THE CIRCUMSTA	ANCES. (Please 4	POSITION, TRANSPER, OR USE use space indicated on reverse.)	REFERENCE NUMBER. (P.	ease use s	pace indicated on reverse.)		
 The owners declare that a viable sample of bas a tuber propagated variety a tissue culture will be 	oe deposited in a p	public repository and maintained for the	e duration of the certificate.				
entitled to protection under the provisions of Se	ction 42 of the Pla	nt Variety Protection Act		listinct, uni	form, and stable as required in Section 42, and is		
Owner(s) is (are) informed that false represents	ation herein can jed						
SIGNATURE OF OWNER	Son	,	SIGNATURE OF OWNER				
NAME (Please point or type)	ww C		NAME (Please print or type)				
Jess Wilson							
CAPACITY OR TITLE Vice President	12		CAPACITY OR TIFLE Vice President	12/2	21/2005		
				<u> </u>			

INSTRUCTIONS

GENERAL.: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvpindex.htm

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 http://www.ams.usda.gov/lsg/seed.htm.

ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

 See Attached
- 24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

Republic of South Africa: PBR application date: July 21, 2005, application number: PT 4492

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filling a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid CMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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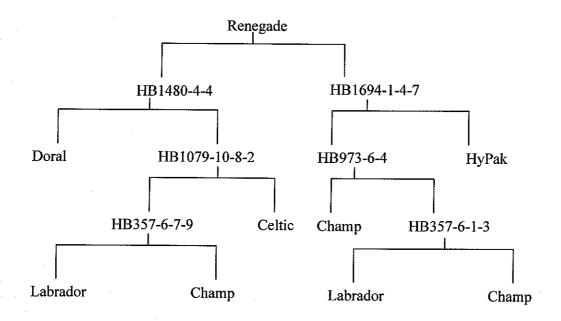
To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.



Syngenta Seeds, Inc. Garden Bean Renegade PVP Application Item 23

<u>Destination</u> <u>Country</u>	Transfer Date	<u>Circumstances</u>
Canada	Mar-05	Variety Trials
France	May-04	Variety Trials
Guatemala	Mar-04	Regional Adaptation Trials
Mexico	Mar-04	Regional Adaptation Trials
Netherlands	Apr-05	Variety Trials
USA	Feb-04	Variety Trials
Rep. South Africa	May-04	Variety Trials

Exhibit A
Origin and Breeding History
'Renegade'



'Renegade' originated from a hand pollinated cross between Syngenta Seeds, Inc. breeding lines HB1480-4-4 and HB1694-1-4-7. HB1480-4-4, HB1694-1-4-7, HB1079-10-8-2, HB973-6-4, HB357-6-7-9, and HB357-6-1-3 are Syngenta Seeds, Inc. breeding lines. Doral, Celtic, and Champ are Syngenta Seeds, Inc. varieties. 'HyPak' is a Harris Moran Seed Company variety and Labrador is a Seminis Seeds, Inc. variety.

Mass selection breeding method was followed from generations F2 through F4 to accumulate the traits of yield and stress tolerance. Selection by pedigree method for very dark 5 to 6 inch pods was applied in the F5. The F6 generation was bulk harvested to supply a seed source for further increases. 'Renegade' has been uniform and genetically stable for four generations of increases from the original F6. No variants were observed.

Exhibit B Statement of Distinctness 'Renegade'

'Renegade' is a bush snap bean suitable for fresh markets that most closely resembles the variety 'Festina'. 'Renegade' differs statistically from 'Festina' in the following traits.

- 1. 'Renegade' and 'Festina' are significantly different in plant height. In Nampa, Idaho, 'Festina' was 5.7 cm greater in plant height than 'Renegade' and 4.6 cm greater in plant height in Stanton, Minnesota. See Attachment B-1 a, thru f.
- 2. There was a significant difference in five-sieve pod length. 'Festina' pod length was 0.68 cm longer than 'Renegade' in Nampa, Idaho, and 2 cm longer in Stanton, Minnesota. See Attachment B-2 a, thru f.

All reported values for plant height and five-sieve pod lengths are based on average measurements.

Data for plant height comparisons were collected in Nampa, Idaho and Stanton, Minnesota during the 2004 growing season. Twenty plants height measurements of each variety were taken at each location. Each plot was comprised of 100 plants.

Data for five-sieve pod length was collected from pods harvested in 2004 from each variety of 100 plant plots in Nampa, Idaho and Stanton, Minnesota. Random samples from a five-sieve lot were measured for pod length.

Exhibit B Statement of Distinctness 'Renegade'

Explanation of statistical analysis variables used in the following attachments

PLHTFESTID = Plant Height (cm), Festina, Idaho
PLHTSBID = Plant Height (cm), Renegade, Idaho
PLHTFESTMN = Plant Height (cm), Festina, Minnesota
PLHTSBMN = Plant Height (cm), Renegade, Minnesota

SV5PLFESTID = Five-Sieve Pod Length (cm), Festina, Idaho SV5PLSBID = Five-Sieve Pod Length (cm), Renegade, Idaho SV5PLFESTMN = Five-Sieve Pod Length (cm), Festina, Minnesota SV5PLSBMN = Five-Sieve Pod Length (cm), Renegade, Minnesota

3/30/2005, 10:49:08 AM

Descriptive Statistics

Variable	N	Mean	SD	Minimum	Maximum
PLHTFESTID	20	49.050	4.3827	42.000	58.000
PLHTSBID	20	43.350	4.2953	35.000	53.000

Attachment B-1a
Plant Height (cm)
Descriptive Statistics
'Festina' vs. 'Renegade'
Nampa, Idaho
2004

3/30/2005, 10:47:36 AM

One-Way AOV for: PLHTFESTID PLHTSBID

Source	DF	SS	MS	F	P
Between	1	324.90	324.900	17.3	0.0002
Within	38	715.50	18.829		
Total	39	1040.40			

Grand Mean 46.200 CV 9.39

Chi-Sq DF P
Bartlett's Test of Equal Variances 0.01 1 0.9310
Cochran's Q 0.5101
Largest Var / Smallest Var 1.0411

Component of variance for between groups 15.3036 Effective cell size 20.0

Variable Mean
PLHTFESTID 49.050
PLHTSBID 43.350
Observations per Mean 20
Standard Error of a Mean 0.9703
Std Error (Diff of 2 Means) 1.3722

Attachment B-1b
Plant Height (cm)
AOV
'Festina' vs. 'Renegade'
Nampa, Idaho
2004

3/30/2005, 10:46:28 AM

LSD All-Pairwise Comparisons Test

Variable Mean Homogeneous Groups
PLHTFESTID 49.050 A
PLHTSBID 43.350 B

Alpha 0.05 Standard Error for Comparison 1.3722 Critical T Value 2.024 Critical Value for Comparison 2.7778 All 2 means are significantly different from one another.

Attachment B-1c Plant Height (cm) Comparison of Means 'Festina' vs. 'Renegade' Nampa, Idaho 2004

3/30/2005, 10:50:39 AM

Descriptive Statistics

Variable	N	Mean	SD	Minimum	Maximum
PLHTFESTMN	20	54.450	3.9533	50.000	64.000
PLHTSBMN	20	49.800	4.3962	43.000	60.000

Attachment B-1d Plant Height (cm) Descriptive Statistics 'Festina' vs. 'Renegade' Stanton, Minnesota 2004

3/30/2005, 10:51:31 AM

One-Way AOV for: PLHTFESTMN PLHTSBMN

Source	DF	SS	MS	F	P
Between	1	216.225	216.225	12.4	0.0011
Within	38	664.150	17.478		
Total	39	880.375			

Grand Mean 52.125 CV 8.02

Chi-Sq DF P
Bartlett's Test of Equal Variances 0.21 1 0.6481
Cochran's Q 0.5529
Largest Var / Smallest Var 1.2366

Component of variance for between groups 9.93737 Effective cell size 20.0

Variable Mean
PLHTFESTMN 54.450
PLHTSBMN 49.800
Observations per Mean 20
Standard Error of a Mean 0.9348
Std Error (Diff of 2 Means) 1.3220

Attachment B-1e
Plant Height (cm)
AOV
'Festina' vs. 'Renegade'
Stanton, Minnesota
2004

3/30/2005, 10:52:29 AM

LSD All-Pairwise Comparisons Test

VariableMeanHomogeneousGroupsPLHTFESTMN54.450APLHTSBMN49.800B

Alpha 0.05 Standard Error for Comparison 1.3220 Critical T Value 2.024 Critical Value for Comparison 2.6763 All 2 means are significantly different from one another.

Attachment B-1f
Plant Height (cm)
Comparison of Means
'Festina' vs. 'Renegade'
Stanton, Minnesota
2004

3/30/2005, 11:06:00 AM

Descriptive Statistics

Variable	N	Mean	0.9462 13.100 16.	Maximum	
SV5PLFESTID	20	14.495	0.9462	13.100	16.500
SV5PLSBID	20	13.815	0.7140	12.800	15.400

Attachment B-2a
Five-Sieve Pod Length (cm)
Descriptive Statistics
'Festina' vs. 'Renegade'
Nampa, Idaho
2004

3/30/2005, 11:07:17 AM

One-Way AOV for: SV5PLFESTID SV5PLSBID

Source DF MS F Between 1 4.6240 4.62400 6.58 Within 38 26.6950 0.70250 Total 39 31.3190

Grand Mean 14.155 CV 5.92

Chi-Sq DF P
Bartlett's Test of Equal Variances 1.45 1 0.2287
Cochran's Q 0.6372
Largest Var / Smallest Var 1.7562

Component of variance for between groups 0.19608 Effective cell size 20.0

Variable Mean
SV5PLFESTID 14.495
SV5PLSBID 13.815
Observations per Mean 20
Standard Error of a Mean 0.1874
Std Error (Diff of 2 Means) 0.2650

Attachment B-2b
Five-Sieve Pod Length (cm)
AOV
'Festina' vs. 'Renegade'
Nampa, Idaho
2004

3/30/2005, 11:07:52 AM

LSD All-Pairwise Comparisons Test

Variable Mean Homogeneous Groups SV5PLFESTID 14.495 A SV5PLSBID 13.815 B

Alpha 0.05 Standard Error for Comparison 0.2650 Critical T Value 2.024 Critical Value for Comparison 0.5366 All 2 means are significantly different from one another.

Attachment B-2c
Five-Sieve Pod Length (cm)
Comparison of Means
'Festina' vs. 'Renegade'
Nampa, Idaho
2004

3/30/2005, 11:09:52 AM

Descriptive Statistics

Variable	N	Mean	SD	Minimum	Maximum
SV5PLFESTMN	20	16.095	1.0665	13.200	17.300
SV5PLSBMN	20	14.900	0.8278	13.400	16.700

Attachment B-2d
Five-Sieve Pod Length (cm)
Descriptive Statistics
'Festina' vs. 'Renegade'
Stanton, Minnesota
2004

3/30/2005, 11:11:07 AM

One-Way AOV for: SV5PLFESTMN SV5PLSBMN

Source DF SS MS F Between 1 14.2802 15.7 14.2802 0.0003 Within 38 34.6295 0.9113 Total 39 48.9097

Grand Mean 15.497 CV 6.16

Chi-Sq DF P
Bartlett's Test of Equal Variances 1.18 1 0.2783
Cochran's Q 0.6240
Largest Var / Smallest Var 1.6597

Component of variance for between groups 0.66845 Effective cell size 20.0

Variable Mean
SV5PLFESTMN 16.095
SV5PLSBMN 14.900
Observations per Mean 20
Standard Error of a Mean 0.2135
Std Error (Diff of 2 Means) 0.3019

Attachment B-2e
Five-Sieve Pod Length (cm)
AOV
'Festina' vs. 'Renegade'
Stanton, Minnesota
2004

3/30/2005, 11:12:09 AM

LSD All-Pairwise Comparisons Test

Variable Mean Homogeneous Groups SV5PLFESTMN 16.095 A SV5PLSBMN 14.900 B

Alpha 0.05 Standard Error for Comparison 0.3019 Critical T Value 2.024 Critical Value for Comparison 0.6111 All 2 means are significantly different from one another.

Attachment B-2f
Five-Sieve Pod Length (cm)
Comparison of Means
'Festina' vs. 'Renegade'
Stanton, Minnesota
2004

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TOD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE Exhibit C

	PLANT VARIETY PROTECT BELTSVILLE, MO		
	SJECTIVE DESCRIPTION	·	
NAME OF APPLICANT (S)	Sarden Bean (Phaseoli TEMPORARY OR EXPERIMENTAL DESIG		TYNAME
Syngenta Seeds, Inc	A ENGLOSION DE LA COMPANION DE		egade
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country)	<u> </u>	TEC	TEMPERATURE CONTRACTOR OF THE PERSON OF THE
600 N. Armstrong Place		PVPO	NUMBER
Boise, ID 83704		4	0600052
PLEASE READ ALL INSTRUCTIONS CAREFULLY:			
Place the appropriate number that describes the variet when number is either 99 or less or 9 or less respective data should be determined from varieties centered in the Horticultural Society or any recognized color standard Please answer all questions for your variety; lack of re-	rely. Data for quantitative plant chan the same trial. Measured data shou may be used to determine plant col	racters should be based on lid be for SPACED PLANTS ors; designate system used	a minimum of 100 plants. Comparative 3. Ranges should also be given. Royal
1. TYPE: 1 1 = Garden 2 = Flageolet 3 =	Romano	<u>, , , , , , , , , , , , , , , , , , , </u>	- And the state of
2. MARKET MATURITY: 5 5 Days to Edible Pods XXXXX Heat Units to Edible Pods 6 7 Number of Days Earlier Than Same As 0 5 Number of Days Later Than	Comparison Variety	Comparison Varieties 1 = Tender crop 3 = Gold rush 5 = Gitana 7 = Bush Blue Lake 290 8 = Other (Specify Below	2 = Kentucky Wonder 4 = Sienderette 6 = Provider Bronco
3. PLANT: 0 6 cm Spacing Between Plants in a Row 1 Habit 1 = Determinate 2 = Indeterminate, Erect 3 = Indeterminate with V 4 = Indeterminate Climb 1	Weak and Prostrate Stem and Brand Sing Habit with Weak, Long, and Tw	Isted Stem and Branches Soung Compla	rison Varieties son Varietles from Section 2 variety

3. PLA	NT: (continued)			
3	Cm Spread			10600052
1	6 cm Narrower Than	8		
	Same Width As	Comparison Variety	Use Comparison Varie	ties from Section 2
X		X Hot wider than	Use Comparison Varieties	
2	Pad Position: 1 = Low	2 = High 3 = Scattered		
3	Bush Form (Illustrated Below	n &		MARIA
	AFRA -			
			A STATE OF THE STA	
		MAN MARKET		
				7
	•			
	1 = Spherical Bush Form	2 = Stem Bush Form	3 = Wide Bush Form	4 = High Bush Form
	5 = Other (Specify)			
4. LEA	VES:	*	•	
2	Surface: 1 = Dull	2 = Glossy 3 = Indeterminate		
3	Size: 1 ≠ Small (Git	tana) 2 = Medium 3 = Larg	e (Tender Crop)	
2		en (as Light or Lighter than Gold Rush)	•	
	2 = Medium G 3 = Dark Gree	sreen en (as Dark or Darker than Bush Blue Lak	xe 290)	
5. ANT	HOCYANIN PIGMENT:	(1 = Absent 2 = Present)		
1	Flowers	Stems 1 Pods	Seeds	
1	Leaves 1	Petioles 1 Pedunck	Nodes	
6 FLO	WER COLOR AND DAYS TO	BLOOM:		
	Color of Standard	Flower Color Choic	<u>285.</u>	
	Color of Wings	1 = White 2 = Cr 3 = Plnk 4 = Lil	ac '	
믉	Color of Keel	5 = Purple 6 = Bi 7 = Other (Specify)		
4 3	Days to 50% Bloom			
7 000	S (Edible Maturity):			
[3]	Exterior Color:	1 = Light Green (as Light or Lighter than	n Provider)	
. —	(Fresh)	2 = Medium Green 3 = Dark Green (as Dark or Darker than		•
	•	4 = Yellow (Gold Rush) 5 = Green-red Variegated (Horticultural)		
	Maria and Maria Arma Andrea and a series	6 = Other (Specify)	2 = Dark (Bush Slue Lake 290)	••
H	Processed Pods (Exterior Col Dry Pod Color:	Nor): 1 = Light (Tender Crop) 1 = Buckskin (Sprite)	2 = Green, Persistent Chlorophyll (Hystyle)	
ن ا	Ery roa color:	b meenmouses (missesses)	The second of th	W. A.
2				Page 2 of 5
CT.470 40	164 631 deciment by the Diams Warless S	Protection Office uning Microsoft Word 2000.	· · · · · · · · · · · · · · · · · · ·	Lating y and A

Thomas Ireland

on (Interlocular C Spur Length 1 = None (Bush f Seeds per Pod ring: 1 * Pr	esent 2 = Absone (Stenderette) avitation): 1 = Non Blue Lake 290)	2 = Sparse ne 2 = Slight 3 = Deep 2 = Sparse sent	3 = Round 3 = Considerable (200	60005
ack: 1 = Process of the Pod) ack: 1 = Process on (Interlocular Cospur Length 1 = None (Bush f Seeds per Pod	esent 2 = Absone (Stenderette) avitation): 1 = North	sent 2 = Sparse ne 2 = Slight 3 = Deep 2 = Sparse sent	3 ≃ Considerable (Provider or Sprite)	200	60005
ca: 1 = No on (Interlocular C Spur Length 1 = None (Bush f Seeds per Pod ring: 1 = Pr	one (Stenderette) avitation): 1 = Noo Blue Lake 290) esent 2 = Abo	2 = Sparse ne 2 = Slight 3 = Deep 2 = Sparse sent				
ca: 1 = No on (Interlocular C Spur Length 1 = None (Bush f Seeds per Pod ring: 1 = Pr	one (Stenderette) avitation): 1 = Noo Blue Lake 290) esent 2 = Abo	2 = Sparse ne 2 = Slight 3 = Deep 2 = Sparse sent				
on (Interlocular C Spur Length 1 = None (Bush f Seeds per Pod ring: 1 * Pr	avitation): 1 = Not Blue Lake 290) esent 2 = Abs	ne 2 = Slight 3 = Deep 2 = Sparse sent				
Spur Length 1 = None (Bush f Seeds per Pod ing: 1 = Pr	Blue Lake 290) esent 2 = Abs	2 = Sparse sent	•	Sprite)		
1 = None (8ush f Seeds per Pod ring: 1 = Pr	esent 2 = Ab	sent	3 = Considerable (Sprite)		
f Seeds per Pod ing: 1 = Pr	esent 2 = Ab	sent	3 = Considerable ((Sprile)		
ing: 1≖Pr	esent 2 = Ab					
elopment: 1 = Sk	ow (Bush Blue Lake 2		_			
		(90) 2 = Med	ium 3 = Fast	(Provider)		
larvest: 1 = Ad		t Adapted				
istribution at opti	mum maturity for not-	flat pods				4.6
m 5.7	6 to 7.34mm	7.34 to 8.34mm	8.34 to 9.53n	nm 9.53 to	10.72 mm	>10.72mm
%	3 %	18 %	69	% 8	%	0
1 2	cm Length	0 7	mm width	0 7	Total mm Thick	kness
1 3	cm Length	0 9	mm width	0 9	Total mm Thick	kness
1 4	cm Length	0 9	mm width	0 9	Total mm Thick	knėss
	cm Length		mm width		Total mm Thici	kness
		+4				
tluster: 1 = Si	niny 2 = Dull 3 = Ser	mi-Shiny 4 = Vari	able			
		lychrome				
	hite 2 = Yellow	3 = Buff Lig	ingē ēn 5=	Brown 6=Pink	7 = Red	8 ≖ Purple
Color: 1 = W 9 = Bi		3 = Buff 11 = Other	4 = Tan 5 =	Brown 6 = Pink	7 = Red	8 = Purple
9 = 8! lary Color: 1 = W	thre 2 = Yellow ue 10 = Black		4 = Striped 5 =	Flecked 6 = Date	ed	
9 = 8i lary Color: 1 = W 9 = Bi	ue 10 = Black	d 3 = Mottled				
9 = 8i lary Color: 1 = W 9 = Bi	ue 10 = Black bild 1 = Splashe		- 			
·C	9 = Bi	9 = Blue 10 = Black y Color: 1 = White 2 = Yellow	9 = Blue 10 = Black 11 = Other y Color: 1 = White 2 = Yellow 3 = Buff 9 = Blue 10 = Black 11 = Other	9 = Blue 10 = Black 11 = Other	9 = Blue 10 = Black 11 = Other	9 = Blue 10 = Black 11 = Other









1 = Elfiptical

2 = Ovai

3 = Cordate

4 = Round

Thomas Ireland

Exhibit C (Garden Bean)

9. SEED SHAPE AND SIZE: (continued) Side View: 200600052 3 = Rerilform 1 = Oval to Oblong 2 = Roundgm/100 Seeds gm/100 Seeds Lighter Than gm/100 Seeds Same As Comparison Variety gm/100 Seeds Heavier Than 10. DISEASE RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant Anthracnose (Colletotrichum lindemuthianum) Race Gamma Race Beta Race Alpha Race Lambda Race Epsilon Race Delta Specify Race Race Kappa Bean Rust (Uromyces appendiculatus) Race 44 Race 40 Race 39 Race 38 Race 50 Race 49 Race 46 Race 45 Race 56 Race 52 Race 54 Race 51 Specify Race Race 59 Powdery Mildew (Ersiphe polygoni) 0 Fusarium Root Rot (Fusarium solani f. sp. phaseoli) 0 Pythium Root Rot (Pythium spp.) 0 Aphanomyces Root Rot (Aphanomyces euteiches) 0 Rhizoctonia Root Rot (Phizoctonia solani) 0 Pythium Blight or Aereal Pythum (Pythium ultimum) Angular Leaf Spot (Isariopsis griseola) 0 Bacterial Wilt (Corynebecterium flaccumfaciens subsp. flaccumfaciens) 0 Bacterial Brown Spot (Pseudomones syringee pv. syringee) 0 Common Bacterial Blight (Xenthomones campostris pv. phaseoli) Halo Blight (Pseudomonas syringae pv. phaselicola) Race 1 Race 2 Clover Yellow Vein Virus (CYVV) Bean Common Mosaic Virus (BCMV) BV1 **NY15** idaho NL8 Florida NL4 Western Туре Mexican Other (Specify) Yellow Bean Mosaic Virus (BYMV) Curly Top Virus (BCTV) Other (Specify Disease and Race or Strain ST-470-12 (M-03) designed by the Plant Variety Protection Office using Microsoft Word 2000.

000	Aphid Leafhopper Lygus Pod Borer	0	esistant: 3 = Intermediate 4 = Tolerant Root Knot Nematode Seed Com Maggot Thrips Weevils	2 (0	6	O	Û	O	J 4
12. PHO	Other (Specify) SIOLOGICAL RESISTANCE Heat Air Poliution Other (Specify)	Cold Ozone	ble 2 = Resistant 3 = Intermediate 4 = Tolerant Drought							

13. COMMENTS

U.S. DEPARTMENT OF AGRICULTURE		ORM APPROVED - OMB No. 0381-0035
AGRICULTURAL MARKETING SERVICE	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held	
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	confidential until the certificate is issu	ed (7 U.S.C. 2426).
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME
Syngenta Seeds, Inc.	OR EXPERIMENTAL NUMBER	Renegade
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
600 North Armstrong Place Boise, ID 83704	208-465-8522	208-467-4559
	7. PVPO NUMBER	
	200600052	
8. Does the applicant own all rights to the variety? Mark an "X" in the	appropriate block. If no, please expla	in. YES NO
9. Is the applicant (individual or company) a U.S. national or a U.S. b.	ased company? If no, give name of co	ountry. YES NO
10. Is the applicant the original owner?	NO If no, please answer one	of the following:
a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. Nationa NO If no, give name of countr	
b. If the original rights to variety were owned by a company(ies), YES	is (are) the original owner(s) a U.S. base NO If no, give name of country	
11. Additional explanation on ownership (Trace ownership from origin	nal breeder to current owner. Use the re	everse for extra space if needed):
Same as on original application.		
Garden Bean, Renegade, was bred and developed by plant breeders Syngenta Seeds, all rights to any invention, discovery or development Syngenta Seeds, with no rights retained by the employee	employed by Syngenta Seeds. By agre t made by the employee while employed	ement between the employee and d by Syngenta Seeds were assigned to
PLEASE NOTE:	1.714	
Plant variety protection can only be afforded to the owners (not license	ees) who meet the following criteria:	
If the rights to the variety are owned by the original breeder, that penational of a country which affords similar protection to nationals of	erson must be a U.S. national, national of	of a UPOV member country, or
If the rights to the variety are owned by the company which employs nationals of a UPOV member country, or owned by nationals of a co- genus and species.	ed the original breeder(s), the company	must be U.S. based, owned by
3. If the applicant is an owner who is not the original owner, both the o	original owner and the applicant must m	eet one of the above criteria.
The original breeder/owner may be the individual or company who dire Act for definitions.	ected the final breeding. See Section 4	1(a)(2) of the Plant Variety Protection
According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, a control number. The valid OMB control number for this information collection is 0581-0055. including the time for reviewing the instructions, searching existing data sources, gathering an	The time required to complete this information collect	tion is estimated to average 0.1 hour per response.
The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and ac status, familial status, parental status, religion, sexual orientation, genetic information, politica program (Not all prohibited bases apply to all programs.) Persons with disabilities who require should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).	tivities on the basis of race, color, national origin, ag	e, disability, and where applicable, sex, marital

To tile a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 [TDD). USDA is an equal opportunity provider and employer.

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Form Approved OMB NO 0581-0055

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

> U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY **PLANT VARIETY PROTECTION OFFICE** BELTSVILLE, MD 20705

EXHIBIT F DECLARATION REGARDING DEPOSIT

NAME OF OWNER (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	TEMPORARY OR EXPERIMENTAL DESIGNATION
Syngenta Seeds, Inc.	600 North Armstrong Place	LEMPONANT ON EXPERIMENTAL DESIGNATION
	Boise, ID 83704 USA	VARIETY NAME Renegade
NAME OF OWNER REPRESENTATIVE (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	FOR OFFICIAL USE ONLY
Kim Briggs 6338 Highway 20-26 Nampa, ID 83687		PVPO NUMBER
		700600052

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

<u>02-/4-200</u> Date